

Weapons of Mass Destruction Training

Incident Response to Terrorist Bombings (IRTB)

Information Package

(12/17/02)



**New Mexico Tech
Energetic Material Research and Testing Center
EMRTC**

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INCIDENT RESPONSE TO TERRORIST BOMBINGS COURSE

APPLICATION PROCESS

All training requests must be approved thru your Office of State and Local Domestic Preparedness Support-Designated State Agency Training “point of contact”.

This training program is supported through the U.S. Department of Homeland Security, Office of Domestic Preparedness (DHS-ODP). It is designed to provide technical operational level training for active State and Local firefighters, law enforcement personnel, emergency medical personnel, and other first responders who have significant responsibility for providing specialized support during WMD incidents, particularly those involving explosive or incendiary materials.

2. Approved car rental, hotel, and per diem costs are reimbursable through the Department of Homeland Security program. Airfare costs are billed directly to the IRTB funded program. Airline and rental car arrangements must be booked through Paradise Travel Agency. Paradise Travel will use alternative airports to reduce the cost of airfares when possible. Mileage will be reimbursed @ 32.5¢ per mile for use of Privately Owned Vehicles (POV's) to and from your residence and the airport. In addition, the IRTB Program Manager must approve all costs that exceed \$50.00 for taxi or limousine services to and from your residence and the airport. The federal lodging rate is \$55.00 per day for Socorro. Hotel costs are reimbursed at a rate of \$55.00 per day plus taxes. The federal per diem rate (meals and incidentals) is \$30.00 per day. **Federal employees are eligible to attend this training on a space available basis. They are NOT eligible for reimbursement under this program and must pay for their own expenses and travel**
3. We encourage you to complete the attached application and submit it through your channels for review and approval as soon as possible. Your timely response will assist us in ensuring you receive the class date of your preference.
4. It is imperative that you provide a personal email address and three (3) preferred class dates. If the application is incomplete, processing of it may be delayed.
5. In addition to the application, we have provided you a course synopsis and applicant information sheet. These are yours to keep. You can access the IRTB training schedule by typing in the following web site: **<http://respond.emrtc.nmt.edu/>** We recommend that you list three (3) class dates in order of preference in Block 5 of the application. We will make every effort to slot you in one of your preferred class dates.
6. The Scheduling Coordinator will review the application to ensure that it contains all the required information. If approved, a confirmation package with your class date will be faxed to you, along with travel, rental car and hotel reservation instructions. You must sign, date and return the confirmation form to us within 5 business days of receipt of the confirmation package.
7. If you have any questions regarding any aspect of the program, please contact us. We will be happy to assist you in any way we can.

Official Application : Incident Response To Terrorist Bombings

Personal Information

Last Name

First Name

MI

Home Address

City

State

Zip

Home Phone

Home Fax

Date of Birth (mm/dd/yyyy)

SSN

Email

Preferred Dates of Attendance

First Preferred (mm/dd/yyyy)

Second Preferred (mm/dd/yyyy)

Third Preferred (mm/dd/yyyy)

Agency Information

Department Name

Position Title

Rank

Mailing Address

City

County

State

Zip

Office Phone

Office Fax

Agency Email

Instructor Certification

Agency Issuing Certification

☐ Yes ☐ No

Copy of Certification Attached

Area of Expertise

Department Head or Designated Individual Approval and Applicant Signature

State Point of Contact Name (Print)

State Point of Contact Signature

Department Head Name (Print)

Department Head Title

Department Head Signature

Date

Applicant Signature

Date

41328

INSTRUCTION SHEET

The following instructions are provided to assist you in completing the application form.

Note: Your DHS-ODP Appointed State Point of Contact must sign at the top of this form or e-mail approval for attendance for this training to respond@emrtc.nmt.edu.

Personal Information:

1. (Last Name) - Self-Explanatory.
2. (Home Address) – Your complete street address to include Apt #, etc.
3. (Personal e-mail) – You **must** provide an email address. This is the most effective means of communication.
4. (Date of Birth) – Example: 04/29/1970.
5. (Preferred Class Dates) – Provide three (3) in order of preference. To view course dates, view the INTERNET website **<http://respond.emrtc.nmt.edu/irtbtechsched.php>**
6. If you are selected to attend a class, a confirmation letter will be faxed to you with instructions to contact the Travel Agency and hotel to make your airline, car rental and hotel reservations.

Agency Information:

7. (Name of Department) – Official Title of Department/Agency you are employed by.
8. (Position Title) – Your official Position/Duty Title.
9. (Rank) – The rank you currently hold.
10. (Mailing Address) – Your department mailing address.
11. **Office phone and FAX numbers - Ensure that a good office phone and fax number is provided on each application.**
12. (County/Parish) – The county in which your Department is located.
13. (Years of Service) – The total number of years you have served in your current area of expertise.
14. (Agency email)

Instructor Certification: Include a copy of highest certification obtained.

Departmental Authorization:

13 Approval and a signature is required from your department/agency to authorize this training.

Applicant Signature:

14. You must sign your name in this block.

PROGRAM OF INSTRUCTION

Purpose

The primary purpose of the Incident Response to Terrorist Bombings course is to provide participants with the skills and knowledge necessary to evaluate and respond effectively to incidents of terrorism that may involve energetic materials and other WMD. An additional purpose of this course is to prepare selected participants to present awareness level training to personnel in their departments on procedures for responding to WMD incidents involving energetic materials. Furthermore, the course is designed to instill in participants a respect for the destructive potential of explosive materials that could be used by terrorists in a WMD incident.

Target Audience

This course is designed for firefighters, law enforcement personnel, and other emergency first responders who have responsibilities for responding to WMD incidents, particularly those involving the use of explosives or incendiaries. Furthermore, most of these personnel will have experience and job responsibilities related to training other personnel within their agencies.

Prerequisites

General Prerequisites

Participation in this training program is limited to operational and technical level firefighters, law enforcement officers with specialized skills/responsibilities, and other emergency response personnel with a demonstrated need for this training. Operational and Technical level firefighters include hazardous material responders, front line investigators, specialized medical/rescue personnel, training officers, bomb technicians, and supervisors and managers responsible for preparing their departments to respond to WMD incidents. Law enforcement officers with specialized skills/responsibilities include members of police tactical units, investigators, training officers, bomb technicians, forensic technicians/scientists, and supervisors and managers responsible for preparing their departments to respond to WMD incidents. The final category—others with a demonstrated need for this training—will be identified by the chiefs of agencies; and written justification is required to support the selection of such personnel to participate in the training. The participant's department at the time of enrollment must verify general prerequisites. Participants must have a picture ID (preferably one issued by their department) for presentation to instructors prior to the start of instruction.

Prerequisite Knowledge, Skills and Abilities

The following prerequisites apply to all personnel attending this course:

- Substantial experience in their respective agencies, in positions beyond entry level.
- Assignment or identification for assignment to a position responsible for conducting WMD training, providing specialized response support during WMD incidents, or coordinating initial response to a WMD incident.
- Sufficient tenure remaining in their current or future position to allow for the application of course material upon their return.
- For personnel who desire trainer certification, completion of an instructor-training program and/or documented experience as a trainer in an emergency response organization is required.

Scope of Course

This is a “operational level” course designed to provide advanced training in WMD, with a focus on explosives and incendiary devices as terrorist weapons. The course offers a unique blend of classroom presentations, field laboratories, one or more case studies and a practical exercise—all designed to familiarize participants with commercial and military explosives, improvised explosive devices, and readily available explosive formulations that

have been used or could be used by terrorists. The normal approach to teaching the course consists of morning classroom sessions followed by afternoon field laboratories on the NMT explosive ranges.

There are 15 modules of instruction included in this training program. These modules include 11 classroom sessions, three field laboratories, and one or more case studies. The following paragraphs provide a synopsis of each module.

Module 1 - Participants are introduced to course and module goals and objectives and administrative requirements for completion of the course and reimbursement for travel costs.

In Module 2, participants are provided a general description of the terrorist threat, focusing on groups that pose the greatest danger in the United States. In addition, they are introduced to terms commonly used to discuss various dimensions of terrorism. The focus of the module is on identifying potential terrorist targets and tactics in the participants' communities. The module also addresses the chemical, biological and radiological threat and summarizes the recent history of terrorist bomb incidents in the United State.

Module 3 provides participants with an introduction to basic terms and concepts associated with energetic materials. In addition, they are provided an overview of hazards associated with the handling of energetic materials.

Module 4 introduces common military and civilian explosives. Topics include characteristics, appearance and explosive power of the most commonly available explosive materials.

Initiation systems for energetic materials are covered in Module 5. Special attention is concentrated on improvised initiators; commercial and military blasting caps; and other materials or devices that could be used in improvised devices. Participants are also provided techniques for identifying initiation devices which, when present at a location, could suggest the active production or assembly of improvised explosive devices.

All Field Laboratories are designed to provide participants with an opportunity to observe and perform under conditions that more closely approximate the real-world environment. In Field Laboratory 1, participants will be afforded the opportunity to observe common explosives, detonators, and other initiating systems first hand that were presented in classroom Modules 4 and 5, and to handle explosive materials where safety guidelines permit. They will then observe the destructive power of selected initiation systems and observe the detonation of explosive materials using these items.

Module 6 introduces participants to "anarchist literature" (the body of literature dedicated to production of explosives and bomb making). A brief summary of the historic development of explosive materials is presented to provide background on the current state of improvised explosives. Throughout this review, details concerning safety and characteristics of formulations are presented. In addition, the instructor presents an overview of explosives production literature published by the "anarchist presses", linking "recipes" to their historic roots. Finally, current trends in improvised explosives used by terrorists and other criminals are summarized during the module.

Participants are familiarized in Module 7 with improvised explosive mixtures based on common fertilizers. The presentation also addresses the significant logistical problems encountered by bomb makers, including the ease of production and the delivery of large scale improvised explosive devices (IEDs).

In Module 8, participants are introduced to a variety of improvised explosive devices (IEDs), produced from commonly available items. Diagrams are used to depict IEDs; however, participants will also be provided the opportunity to observe and handle a number of inert devices that replicate common IED designs. Specific IED components, such as triggering systems, initiation mechanisms and concealment techniques are described.

Airblast/Post-blast pathology is the topic of Module 9. In this module, participants are introduced to the different mechanisms of physical injury that can occur in a bombing incident. The principle of airblast is discussed and the interaction of airblast with the human body is summarized. A breakdown of the full spectrum of injury mechanisms possible from a bomb blast is also reviewed. As part of this module, victim signs, symptoms, and first aid treatment are all discussed as each of these pertain to the various types of expected injuries.

Participants are introduced to concepts associated with post-blast evidence collection in Module 10. The most valuable sources of evidence in bombing investigations is discussed, and a brief overview of chemical residue analysis and mechanisms for contamination is presented.

Field Laboratory 2 provides participants the opportunity to view a variety of improvised explosives and handle explosive components where safety guidelines permit. In addition, they will witness the detonation of improvised explosive devices in several sizes and observe the dangers and destructive power of these substances.

Incident scene response is presented in Module 11. Participants will discuss issues associated with response to three general scenarios: pre-detonation, post-detonation and continuing explosives incidents. The impact of various policies and procedures is examined and participants are encouraged to review policies and procedures within their own agencies and departments in the context of information presented in this course.

Module 12 addresses airblast effects on structures. Participants are introduced to the various levels of damage to building structures and to non-structural building components resulting from the airblast of an explosive event. The effect of physical hazards and secondary safety concerns on urban search and rescue operations is reviewed. Methods of mitigating the effects of blast damage are discussed in order to support planning and emergency response requirements.

Module 13 provides one or more case studies. These case study presentations are based on recent WMD incidents involving explosive devices (i.e., World Trade Center, Oklahoma City, Atlanta bombings, etc.) and include a summary of the incident(s) and lessons learned by responding agencies.

In Field Laboratory 3, participants will view research dummies in simulated office settings on the range (building constructed for the demonstration, office furnishings and research dummies). Small explosive devices (letter and briefcase bombs) will be detonated in those settings. Participants will then be given an opportunity to view the impact of the explosives on the scene, including damage done to the dummies. In addition, participants will observe the detonation of a large-scale vehicle bomb located adjacent to a wooden structure. After the detonation, they will be provided an opportunity to observe first hand the extensive damage to both the vehicle and the structure.

Module 14 is a practical exercise that provides participants with an opportunity to apply the skills and knowledge they have acquired during the course. Participants are assigned to teams and required to assess scenarios provided by the instructor. During each assessment, participants develop an action plan for responding to a simulation involving either a threatened WMD attack or an attack that has already been executed using WMD. At the conclusion of the practical exercise, each team presents its assessment results to instructors and other participants, generating further discussions on appropriate response actions.

Module 15 summarizes the major points presented during the course. In addition, instructors will elicit participant feedback that can be used in improving subsequent course content and presentation. Participants are encouraged to ask any final questions of instructors and identify any additional information or materials that would be helpful to them in performing their WMD related responsibilities. A post-test is then administered to personnel who have either requested a *Trainer Certificate* or credit for professional training. Finally, certificates are presented to all participants who have completed course requirements.

Testing and Evaluation Requirements

Understanding of Cognitive Goal and Objectives

After completion of instruction, participants who have requested trainer certification will be administered a post-test. The test will include one or more items designed to assess understanding of each module objective. Successful performance on the post-test (scoring 70% or better) will be recognized by issuance of a "Trainer Certification" that recognizes the capability of a participant to present awareness level instruction to other personnel in his/her agency. Participants who do not request trainer certification and participants who fail to perform satisfactorily (score less than 70%) on the post-test will be issued a certificate acknowledging their completion of training.